

A N
INTRODUCTION
T O
ARITHMETIC,

CONSISTING OF
Printed Examples in the first Four Rules,

W I T H
Approved TABLES of WEIGHTS and MEASURES,

D E S I G N E D

To facilitate the Progress of young Beginners, and to
diminish the Labor of the Tutor.

By *WILLIAM BUTLER.*

L O N D O N:

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M D C C L X X X I V.



P R E F A C E.

THE usefulness of ARITHMETIC in every situation of life being universally admitted, it is presumed that an attempt to render its introductory and most important rules more perspicuous to the learner, and the teaching of them less irksome to the instructor, will meet with a favorable reception from both.

The idea of this little work was first suggested by a frequent observation of the comparatively small improvement which young persons generally make in Arithmetic while at school, and particularly those of the female sex, whose inferiority of capacity, however, no man of sense will attempt to maintain.

The most probable causes of their deficiency, are the want of a more early and regular initiation into the rules of this science, and the expedition with which they are usually carried through its first principles.

It is not uncommon to meet with young ladies who have learned to write some years without the least acquaintance with figures, or to find their cyphering books with scarcely half a dozen sums in either of the rules, and perhaps the rules themselves without written definitions to give the learner a proper notion of their meaning.

This

This it may be expected will continue to be the case without some such assistance to the teacher as is here offered, as it is almost impossible for any one in a respectable line of employment to find leisure enough to write in the books of all his pupils the several rules and definitions at length, and a sufficient number of elementary examples, without greatly infringing on that time which might be much more profitably employed.

Besides, the business of writing any large number of the common sums is in itself so perfectly menial, that few penmen, of the least professional ingenuity, can submit to it.

To such, in particular, the Author flatters himself this small performance will be acceptable, and especially to those who attend the schools of young ladies, for whose use it was originally drawn up and committed to the press.

He at first intended it to have been confined to the circle of his own scholars, and it is only in consequence of the pressing solicitations of some particular friends, who wished to avail themselves of such an help for getting rid of their long accustomed toil, that he now consents to its publication.

N. B. To prevent plagiarism in the scholars, there are blanks left for the master to fill up at pleasure and thus diversify the several sums.

Oxford-Court, Cannon-Street,
August 14, 1784.

ARITHMETIC

IS the art of computing by numbers ; teaches how to find the proportion, quantity, or value of things with expedition and ease ; and is performed by the ten following figures,

1 2 3 4 5 6 7 8 9 0

The principal rules are five, viz. Numeration, Addition, Subtraction, Multiplication, and Division ; all other rules being only applications of these.

NUMERATION

Teaches how to read or write any proposed sum, and to find the different value of any given number of figures.

The NUMERATION TABLE.

Units	Tens	Hundreds	Thousands	Tens of Thousands	Hundreds of Thousands	Millions	Tens of Millions	Hundreds of Millions
1	2	3	4	5	6	7	8	9
2	3	4	5	6	7	8	9	
3	4	5	6	7	8	9		
4	5	6	7	8	9			
5	6	7	8	9				
6	7	8	9					
7	8	9						
8	9							
9								

THE APPLICATION.

Write in figures the following numbers :

Twenty-four—eighty-fix—ninety—one hundred and forty-fix—three hundred and twelve—seven thousand fix hundred and thirty-three—fix hundred twenty-four thousand two hundred and twenty-nine—seven millions three hundred eighteen thousand three hundred and seventy-three—thirty-four millions nine hundred forty-two thousand five hundred and thirteen—nine millions—fix thousands—five hundreds.

Write the following numbers in words :

45 — 59 — 106 — 1484 — 30807 — 876000 — 7008548 — 13848756 — 370874843.

SIMPLE ADDITION

CONSISTS in finding the amount of several numbers of the same denomination, and the number thus found is called the Sum or Total, because it is equal to all the several given Parts.

ADDITION and SUBTRACTION TABLE.

1	2	3	4	5	6	7	8	9
2	4	5	6	7	8	9	10	11
3	5	6	7	8	9	10	11	12
4	6	7	8	9	10	11	12	13
5	7	8	9	10	11	12	13	14
6	8	9	10	11	12	13	14	15
7	9	10	11	12	13	14	15	16
8	10	11	12	13	14	15	16	17
9	11	12	13	14	15	16	17	18

Units
Tens
Hundreds
Thousands.....

4502

7848

1874

8147

7194

1487

7164

1213

5396

1471

3371

4298

53968

41466

3958

Units
Tens
Hundreds
Thousands.....

2433

7842

8060

8692

3200

1892

7148

5450

1483

4871

837

5398

49475

51900

Units
Tens
Hundreds
Thousands.....

8309

1784

1837

2590

6028

5320

1897

9190

3062

1073

874

44984

33633

364

Miles.	Furlongs.	Poles.
7643	2678	3028
1487	1999	2930
7814	7188	5029
1000	1270	189
8765	9147	6728
1894	9999	3243
3718	3060	715
139	9565	199
96	800	3933
675	746	7690
	34	34
<u>33231</u>	<u>46406</u>	<u>33710</u>
<u>25500</u>	<u>43000</u>	<u>30690</u>
<u>33231</u>	<u>46406</u>	<u>33710</u>

Gallons.	Quarts.	Pints.
2323	3456	2577
7654	1849	9148
4567	2734	4327
5674	1878	1809
4028	5727	7250
2460	1686	6819
1376	5555	506
9990	1906	146
5326	6564	6655
874	5137	741
7650	6529	2229
<u>53022</u>	<u>42021</u>	<u>42207</u>
<u>50699</u>	<u>30565</u>	<u>39630</u>
<u>53022</u>	<u>42021</u>	<u>42207</u>

ADDITION OF MONEY

TEACHES to collect numbers of different denominations into one total, equal in value to the several given sums, and usually consists of pounds, shillings, pence, and farthings.

£ denotes pounds, S. shillings, and D. pence.

T A B L E S.

s.	£	s.	d.	s.	d.
20..... make	1	—	12..... make	1	—
30.....	1	10	15.....	1	3
40.....	2	—	18.....	1	6
50.....	2	10	20.....	1	8
60.....	3	—	24.....	2	—
70.....	3	10	30.....	2	6
80.....	4	—	36.....	3	—
90.....	4	10	40.....	3	4
100.....	5	—	48.....	4	—
110.....	5	10	50.....	4	2
120.....	6	—	60.....	5	—
130.....	6	10	70.....	5	10
140.....	7	—	72.....	6	—
150.....	7	10	80.....	6	8
160.....	8	—	84.....	7	—
170.....	8	10	90.....	7	6
180.....	9	—	96.....	8	—
190.....	9	10	100.....	8	4
200.....	10	—	108.....	9	—
			110.....	9	2
			120.....	10	—
			130.....	10	10
			132.....	11	—
			140.....	11	8
			144.....	12	—

4 Farthings make 1 Penny.
12 Pence, 1 Shilling.
20 Shillings, 1 Pound.
 $\frac{1}{4}$ a Farthing, $\frac{1}{2}$ a Half-penny,
 $\frac{3}{4}$ Three Farthings.

4 Farthings make 1 Penny.
 12 Pence, 1 Shilling.
 20 Shillings, 1 Pound.
 $\frac{1}{4}$ a Farthing, $\frac{1}{2}$ a Half-penny,
 $\frac{3}{4}$ Three Farthings.

E X A M P L E S.

£	s.	d.	£	s.	d.
764	" 10	" 11 $\frac{1}{4}$	374	" 14	" 10 $\frac{1}{2}$
164	" 9	" 9	748	" 3	" 5 $\frac{3}{4}$
476	" 7	" 10 $\frac{3}{4}$	147	" 6	" 3 $\frac{1}{2}$
185	" 12	" 7 $\frac{1}{2}$	841	" 15	" 10 $\frac{1}{4}$
292	" 5	" 8	743	" 7	" 9 $\frac{1}{2}$
765	" 13	" 9 $\frac{1}{4}$	349	" 13	" 7 $\frac{3}{4}$
2649	" 10	" 7 $\frac{3}{4}$	3205	" 1	" 1 $\frac{1}{2}$

£	s.	d.	£	s.	d.
743	" 13	" 3 $\frac{3}{4}$	653	" 13	" 10 $\frac{1}{2}$
900	" 7	" 5 $\frac{1}{2}$	50	" 7	" 7 $\frac{3}{4}$
444	" 9	" 10 $\frac{3}{4}$	909	" 14	" 9 $\frac{1}{4}$
282	" 5	" 5 $\frac{1}{4}$	983	" 6	" 11 $\frac{1}{2}$
409	" 10	" 2 $\frac{1}{4}$	115	" 7	" 8 $\frac{3}{4}$
980	" 5	" 9 $\frac{3}{4}$	156	" 3	" 4 $\frac{1}{2}$
3760	" 12	" 1 $\frac{1}{4}$	2060	" 14	" 4 $\frac{1}{4}$

£	s.	d.	£	s.	d.
348	"	19	"	2	$\frac{3}{4}$
390	"	3	"	6	$\frac{1}{2}$
432	"	13	"	9	$\frac{3}{4}$
890	"	2	"	8	$\frac{1}{4}$
523	"	19	"	2	$\frac{1}{2}$
1	"	3	"	7	

£	s.	d.	£	s.	d.
292	"	8	"	8	$\frac{1}{4}$
608	"	9	"	9	$\frac{1}{2}$
639	"	12	"	6	$\frac{3}{4}$
900	"	3	"	7	$\frac{1}{2}$
293	"	5	"	5	$\frac{3}{4}$
78	"	14	"	7	

590	"	2	"	4	$\frac{3}{4}$
2012	"	14	"	8	$\frac{3}{4}$

£	s.	d.	£	s.	d.
764	"	16	"	5	$\frac{1}{4}$
935	"	7	"	3	$\frac{3}{4}$
888	"	18	"	8	$\frac{1}{2}$
646	"	2	"	6	$\frac{3}{4}$
555	"	19	"	2	$\frac{1}{2}$
7	"	7	"	7	

£	s.	d.	£	s.	d.
322	"	9	"	3	$\frac{3}{4}$
533	"	6	"	9	$\frac{1}{4}$
428	"	4	"	3	$\frac{1}{2}$
188	"	5	"	2	$\frac{1}{4}$
439	"	7	"	6	$\frac{1}{2}$
1	"	3	"	7	

3790	"	11	"	9	$\frac{3}{4}$
1915	"	16	"	8	$\frac{1}{4}$

£	s.	d.	£	s.	d.				
174	"	16	"	748	"	16	"	8½	
189	"	16	"	8¼	183	"	19	"	11¾
874	"	17	"	5¾	764	"	13	"	5½
118	"	10	"	8½	178	"	15	"	8¼
764	"	5	"	7¼	369	"	19	"	9¾
378	"	18	"	4	374	"	3	"	4
2501	"	5	"	8¼	2620	"	8	"	11¾

£	s.	d.	£	s.	d.	
764	"	16	"	7	"	7
189	"	19	"	18	"	8 $\frac{1}{4}$
716	"	10	"	13	"	7 $\frac{1}{2}$
184	"	13	"	19	"	3 $\frac{3}{4}$
769	"	14	"	16	"	8 $\frac{1}{4}$
8	"	7	"	4	"	7
2634	"	2	"	0	"	5 $\frac{3}{4}$

£	s.	d.
999	" 19	" 9½
123	" 19	" 11¾
184	" 14	" 5¼
376	" 18	" 10½
100	" 19	" 5¼
—	" 7	" 8

1187 " 0 " 2 7¼

£	s.	d.
876	" 19	" 10½
183	" 14	" 5¾
784	" 19	" 7½
168	" 14	" 5¾
376	" 19	" 9½
74	" 3	" 7

2465 " 11 " 10

£	s.	d.
376	" 16	" 8¼
109	" 15	" 5½
649	" 19	" 8¾
164	" 13	" 10¼
584	" 19	" 5½
8	" 4	" 3

1894 " 9 " 5 ¼

£	s.	d.
643	" 19	" 8½
176	" 14	" 11¾
846	" 19	" 5
137	" 16	" 10½
184	" 19	" 5¾
717	" 4	" 8

2787 " 15 " 1 ¼

£ 184 " $s.$ 16 " $d.$ $8\frac{1}{2}$

716 " 16 " $10\frac{1}{4}$

184 " 19 " $9\frac{3}{4}$

376 " 14 " 3

164 " 13 " $8\frac{1}{2}$

376 " 19 " $7\frac{3}{4}$

184 " 16 " $11\frac{1}{4}$

719 " 18 " 9

999 " 19 " $2\frac{3}{4}$

7 " 8 " 3

3917 " 4 " $3\frac{3}{4}$

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" "

£ 376 " $s.$ 16 " $d.$ $8\frac{1}{4}$

183 " 19 " $7\frac{3}{4}$

376 " 12 " $8\frac{1}{2}$

487 " 10 " $7\frac{1}{4}$

314 " 15 " $5\frac{1}{2}$

164 " 16 " $8\frac{1}{4}$

376 " 15 " $5\frac{1}{4}$

190 " 19 " 2

808 " 12 " $10\frac{1}{4}$

714 " 4 " 3

3995 " 3 " 6

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$\pounds$	s.	d.	$\pounds$	s.	d.
500	13	11 $\frac{1}{4}$	700	10	11 $\frac{3}{4}$
847	10	10 $\frac{3}{4}$	784	4	7 $\frac{1}{4}$
764	13	5 $\frac{1}{2}$	137	12	10
187	14	7	484	19	3 $\frac{3}{4}$
22	2	6 $\frac{1}{4}$	378	14	11 $\frac{1}{4}$
19	18	3 $\frac{1}{2}$	437	8	4
19	3	2	129	6	4 $\frac{1}{2}$
197	17	8 $\frac{1}{4}$	34	18	7 $\frac{1}{4}$
25	13	7 $\frac{1}{2}$	154	14	6
8	7	4	78	7	8
2593	15	6.	2520	18	1 $\frac{3}{4}$
"	"		"	"	
"	"		"	"	

£	s.	d.	£	s.	d.
437	"	16	"	12	" 5 $\frac{3}{4}$
837	"	19	"	19	" 8
764	"	13	"	16	" 7 $\frac{1}{4}$
837	"	16	"	19	" 10
643	"	13	"	13	" 2
692	"	12	"	15	" 5
164	"	19	"	12	" 9
716	"	14	"	10	" 2 $\frac{1}{4}$
222	"	9	"	16	" 6
74	"	3	"	3	" 7
5393	"	0	"	10 $\frac{3}{4}$	5225 " 0 " 2 $\frac{1}{4}$
"	"		"	"	
"	"		"	"	

$\pounds$	s.	d.	$\pounds$	s.	d.
384	9	$10\frac{3}{4}$	836	14	$8\frac{3}{4}$
787	16	8	547	17	10
704	15	$3\frac{1}{4}$	375	19	$5\frac{1}{4}$
878	18	$\frac{1}{4}$	471	10	11
119	3	$11\frac{1}{4}$	847	9	$4\frac{1}{4}$
464	19	5	797	18	9
387	16	$10\frac{3}{4}$	962	13	$3\frac{3}{4}$
114	2	9	284	16	11
537	19	$6\frac{3}{4}$	65	19	$7\frac{3}{4}$
7	4	3	7	$\frac{4}{5}$	$\frac{7}{2}\frac{1}{4}$

1387 " 6 " $11\frac{3}{4}$ 5202 " 10 " 8 :

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$\pounds$	s.	d.	$\pounds$	s.	d.				
476	"	16	"	500	"	15	"	7 $\frac{3}{4}$	
467	"	14	"	716	"	16	"	3	
800	"	8	"	876	"	7	"	11 $\frac{1}{4}$	
714	"	18	"	641	"	18	"	10	
993	"	14	"	844	"	19	"	8 $\frac{3}{4}$	
416	"	13	"	333	"	13	"	5	
345	"	17	"	719	"	18	"	10 $\frac{1}{2}$	
874	"	10	"	148	"	16	"	8 $\frac{1}{4}$	
636	"	19	"	103	"	13	"	11 $\frac{3}{4}$	
74	"	3	"	87	"	7	"	7	
5801	"	17	"	0 $\frac{1}{4}$	4974	"	8	"	11 $\frac{1}{4}$
"	"	"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"	"	"

$\pounds$	s.	d.	$\pounds$	s.	d.
264	6	$5\frac{1}{4}$	292	18	$8\frac{1}{4}$
932	17	$3\frac{3}{4}$	628	19	$9\frac{1}{2}$
888	8	$8\frac{1}{2}$	632	12	$6\frac{3}{4}$
646	12	$10\frac{3}{4}$	900	13	$10\frac{1}{2}$
555	9	$2\frac{1}{2}$	293	15	$5\frac{3}{4}$
322	19	$3\frac{3}{4}$	184	19	$8\frac{3}{4}$
533	6	$10\frac{1}{4}$	342	12	$2\frac{3}{4}$
428	14	$3\frac{1}{2}$	320	13	$6\frac{1}{2}$
88	5	$2\frac{1}{4}$	432	13	$9\frac{3}{4}$
7	8	11	748	3	4

4668	9	$1\frac{1}{2}$	4778	3	$0\frac{1}{2}$
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$\pounds$	s.	d.	$\pounds$	s.	d.
274	" 12	" $10\frac{1}{2}$	264	" 16	" $8\frac{1}{4}$
182	" 16	" $8\frac{1}{4}$	189	" 12	" $10\frac{1}{2}$
824	" 17	" $5\frac{3}{4}$	726	" 12	" $5\frac{1}{4}$
118	" 12	" $2\frac{1}{2}$	182	" 13	" $2\frac{3}{4}$
264	" 15	" $7\frac{1}{4}$	729	" 14	" $7\frac{1}{2}$
742	" 12	" $8\frac{1}{2}$	269	" 12	" $9\frac{3}{4}$
183	" 19	" $11\frac{3}{4}$	382	" 18	" $2\frac{1}{4}$
724	" 12	" $2\frac{1}{2}$	200	" 13	" $7\frac{1}{2}$
278	" 15	" $8\frac{1}{4}$	764	" 17	" $3\frac{3}{4}$
817	" 4	" 3	785	" 4	" 3

4412	" 19"	$8\frac{1}{4}$	4496	" 16"	$0\frac{1}{2}$
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£ s. d.
276 " 12 " 8 $\frac{1}{4}$

329 " 15 " 2 $\frac{1}{2}$

692 " 19 " 8 $\frac{3}{4}$

164 " 13 " 10 $\frac{1}{4}$

284 " 12 " 5

642 " 19 " 2 $\frac{1}{2}$

176 " 14 " 11 $\frac{3}{4}$

246 " 12 " 5

132 " 16 " 10 $\frac{1}{2}$

" " 7 " 7

2948 " 4 " 11 $\frac{1}{2}$

" "

" "

£ s. d.
876 " 19 " 10 $\frac{1}{2}$

221 " 12 " 5 $\frac{3}{4}$

842 " 19 " 2 $\frac{1}{2}$

128 " 12 " 5 $\frac{3}{4}$

276 " 19 " 2 $\frac{1}{2}$

222 " 9 " 9 $\frac{1}{2}$

123 " 9 " 11 $\frac{3}{4}$

184 " 12 " 5 $\frac{1}{4}$

322 " 18 " 10 $\frac{1}{2}$

871 " 3 " 3

4071 " 17 " 7

" "

" "

£	$s.$	$d.$		£	$s.$	$d.$			
824	"	17	"	6 $\frac{1}{2}$	237	"	17	"	6 $\frac{1}{4}$
261	"	18	"	7	318	"	16	"	7
128	"	16	"	10 $\frac{3}{4}$	236	"	12	"	7 $\frac{1}{2}$
369	"	17	"	9	471	"	17	"	8 $\frac{1}{4}$
216	"	14	"	3 $\frac{1}{2}$	134	"	18	"	10
136	"	11	"	8	216	"	15	"	6 $\frac{1}{4}$
814	"	13	"	10 $\frac{1}{4}$	737	"	15	"	4 $\frac{1}{4}$
271	"	16	"	4	105	"	12	"	9
189	"	14	"	9 $\frac{3}{4}$	828	"	12	"	5 $\frac{1}{4}$
34	"	3	"	7	877	"	7	"	1

$\text{£} 166$	"	6	"	4 $\frac{3}{4}$	$\text{£} 170$	"	18	"	2 $\frac{3}{4}$
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"	"
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"	"
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$\pounds$	s.	d.	$\pounds$	s.	d.
650	" 13	" 8	870	" 19	" $10\frac{3}{4}$
287	" 14	" $9\frac{3}{4}$	197	" 5	" $10\frac{1}{4}$
740	" 16	" $3\frac{1}{2}$	744	" 10	" 8
127	" 17	" 4	424	" 13	" $9\frac{3}{4}$
829	" 9	" $6\frac{1}{4}$	380	" 11	" 1
129	" 13	" $8\frac{1}{2}$	472	" 13	" $4\frac{1}{4}$
190	" 13	" 5	297	" 16	" $8\frac{1}{2}$
917	" 18	" $7\frac{1}{4}$	424	" 17	" $8\frac{1}{4}$
295	" 17	" $3\frac{1}{2}$	514	" 16	" 4
—	" 3	" 7	87	" 4	" $3\frac{1}{4}$
4415	" 9	" 8	2699	" 19	" $6\frac{1}{4}$
"	"		"	"	
"	"		"	"	

$\pounds$	s.	d.	$\pounds$	s.	d.
247	" 13	" $6\frac{3}{4}$	264	" 15	" $2\frac{3}{4}$
183	" 15	" 9	716	" 18	" 9
274	" 10	" $3\frac{1}{2}$	762	" 17	" $6\frac{1}{4}$
187	" 12	" $3\frac{3}{4}$	460	" 10	" 9
431	" 18	" $3\frac{3}{4}$	376	" 18	" $2\frac{1}{4}$
629	" 16	" 10	423	" 19	" 5
145	" 12	" $9\frac{1}{4}$	164	" 15	" 2
271	" 16	" 7	843	" 12	" $9\frac{1}{4}$
242	" 19	" $9\frac{1}{4}$	250	" 19	" 7
84	" 3	" 4	874	" 3	" 0

2699 " 19 " $6\frac{1}{4}$	5139 " 10 " $4\frac{1}{2}$
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£	s.	d.
234	9	10 $\frac{3}{4}$
728	18	6
247	10	5 $\frac{1}{2}$
827	17	8
192	8	3 $\frac{1}{4}$
424	19	6
237	18	6
141	12	8
257	10	9 $\frac{3}{4}$
3	7	7

£	s.	d.
823	16	4 $\frac{3}{4}$
254	18	10
357	17	9 $\frac{1}{4}$
247	12	10
879	6	5
277	19	8 $\frac{1}{4}$
692	13	9
428	12	6 $\frac{1}{4}$
625	13	9
714	7	8 $\frac{2}{4}$

3296 13 10 $\frac{1}{4}$

5302 19 8 $\frac{1}{4}$

" "

" "

" "

" "

$\pounds$	s.	d.	$\pounds$	s.	d.
647	" 15	" $6\frac{1}{4}$	450	" 18	" $5\frac{3}{4}$
426	" 12	" 5	572	" 13	" 6
180	" 17	" 10	186	" 2	" $10\frac{1}{4}$
271	" 13	" $2\frac{3}{4}$	261	" 16	" 8
923	" 19	" 6	480	" 17	" $4\frac{3}{4}$
641	" 14	" 8	316	" 14	" 4
234	" 16	" $7\frac{1}{4}$	291	" 15	" $3\frac{1}{2}$
428	" 14	" 10	739	" 18	" 10
633	" 17	" $9\frac{1}{2}$	310	" 12	" $8\frac{3}{4}$
784	" 13	" 3	87	" 4	" 3
517	" 15	" $7\frac{3}{4}$	3698	" 14	" 4
"	"		"	"	
"	"		"	"	

THE APPLICATION.

A Man born in the year 1754, when will he be 84 years of age?

$$\begin{array}{r} 1754 \\ 84 \\ \hline \end{array}$$

1838 Answer.

If a person owes 100l. to A—34l. 6s. 4d to B—10 guineas to C—13s. 4d $\frac{3}{4}$ to D—and 19s. to E. What does he owe in all?

£	s.	d.
100	0	0
34	6	4
10	10	0
00	13	4 $\frac{3}{4}$
000	19	0

146 " 8 " 8 $\frac{3}{4}$ Answer.

A Man borrowed a certain sum of money,
and paid in part 45l. 6s. 8d. and left unpaid
7128l. 16s. 4d. What was the sum borrowed?

£	s.	d.	
145	6	8	
7128	16	4	
7274	3	0	Answer.

If the yearly rent of a house be 40l.—window-
lights, 1l. 7s. 10d.—tythes, 17s. 6d.—poor's rates,
—1l. 10s.—watch, 12s. 10d.—water, a guinea
—lighting the lamps, 18s. what is the whole
annual expence?

£	s.	d.	
40	0	0	
1	7	10	
0	17	6	
1	10	0	
0	12	10	
1	1	0	
0	18	0	
46	7	2	Answer.

Laid out in beef, 14s. 10d. $\frac{1}{2}$ —in Mutton, 17s. 4d. $\frac{3}{4}$ —in veal, 18s. 10d. $\frac{1}{4}$ —in Lamb, 15s. 4d. $\frac{1}{2}$ —in vegetables, 11s. 9d. $\frac{3}{4}$ —in butter, 1s. 4d. $\frac{1}{2}$.
How much was expended in all?

£	s.	d.	
14	10	$\frac{1}{2}$	
17	4	$\frac{3}{4}$	
18	10	$\frac{1}{4}$	
15	4	$\frac{1}{2}$	
11	9	$\frac{3}{4}$	
1	4	$\frac{1}{2}$	
3	9	8	$\frac{1}{4}$ Answer.

Paid a baker's bill of 1l. 16s. 4d.—a butcher's of 2l. 10s.—a cheesemonger's of 13s. 10d. $\frac{1}{2}$ —a milliner's of 5l. 15s. 4d. and a mantua-maker's of 1l. 19s. 7d. What sum do they all amount to?

£	s.	d.	
1	16	4	
2	10	0	
0	13	10 $\frac{1}{2}$	
5	15	4	
1	19	7	
			$\frac{1}{2}$ Answer.

Expended in gloves, 6s. 8d.—in gauze, 17s. 4d $\frac{3}{4}$
—in ribbon, 11s. 11d $\frac{1}{2}$ —in stockings, 14s. 6d.—
in lace, 1l. 14s. 6d.—in cambric, 18s. 9d $\frac{3}{4}$ —
in muslin, 3l. 19s. 6d. What was the whole
sum spent?

£	s.	d.
	6	8
	17	4 $\frac{3}{4}$
	11	11 $\frac{1}{2}$
	14	6
1	14	6
3	19	9 $\frac{3}{4}$

Answer.

Bought six yards of mode, at 6s. 4d. per yd.
—six yards of lining, at 3s. 2d. per yd.—nine
yards of lace, at 4s. 10d. per yd. and paid for
making the cloak 2s. 6d. What is the amount
of the whole?

0	6	4
0	3	2
0	4	10
0	2	6

SIMPLE SUBTRACTION.

TEACHES to take a less number from a greater of the same denomination and shews the difference or remainder.

	Busshels.		Pecks.
From	18716487		180071648
Take	9416341		100076782
Rem.	<u>09300146</u>		<u>079994866</u>
Proof	<u>18716487</u>		<u>180077648</u>

713467004		80007000
137831376		71376700
<u>575635628</u>		<u>08630300</u>
<u>713467004</u>		<u>80007000</u>

Yards.	Ells.
1 8 4 0 8 7 1	1 4 0 0 4 3 7 4
1 4 3 7 1 9 9	1 2 3 9 9 9 1 5
<u>4 0 3 6 7 2</u>	<u>1 6 0 4 4 5 9</u>
<u>1 8 4 0 8 7 1</u>	<u>1 4 0 0 4 3 7 4</u>
3 0 0 0 0 0 0	1 4 0 0 0 0 0 0 0
1 7 4 3 8 2 3	7 7 7 7 7 9 4 5
<u>1 2 5 6 7 7 7</u>	<u>6 2 2 2 2 0 5 5</u>
<u>3 0 0 0 0 0 0</u>	<u>1 4 0 0 0 0 0 0 0</u>
1 5 8 7 1 4 8 7	1 5 8 7 1 4 0 0 4
1 1 4 3 1 8 4 3	7 3 4 1 8 7 5 8
<u>4 4 3 9 6 4 4</u>	<u>8 5 2 9 5 2 4 6</u>
<u>1 5 8 7 1 4 8 7</u>	<u>1 5 8 7 1 4 0 0 4</u>
1 3 8 5 5 5 5 4	6 4 8 3 3 3 3 7
1 2 4 9 9 9 9 9	3 7 4 9 4 2 1 6
<u>1 3 5 5 5 5 5</u>	<u>3 7 3 3 9 1 2 7</u>
<u>1 3 8 5 5 5 5 4</u>	<u>6 4 8 3 3 3 3 7</u>

SUBTRACTION of MONEY.

TEACHES to find the difference of any two sums of money consisting of different denominations.

£	s.	d.	£	s.	d.
187	10	4½	764	16	8½
118	19	7¾	200	14	11¾
<u>69</u>	<u>10</u>	<u>8¾</u>	<u>564</u>	<u>1</u>	<u>8¾</u>
187	10	4½	764	16	8½

£	s.	d.	£	s.	d.
722	11	11	764	11	11
187	19	7½	276	18	7¼
<u>534</u>	<u>12</u>	<u>3½</u>	<u>487</u>	<u>13</u>	<u>3¾</u>
722	11	11	764	11	11

£	s.	d.	£	s.	d.
1876	" 19	" 4½	700	" 14	" 4
843	" 14	" 8¼	174	" 14	" 4¼
1023	" 4	" 8¼	525	" 19	" 11¾
1876	" 19	" 4½	700	" 14	" 4

£	s.	d.	£	s.	d.
1716	" 8	" 8¼	764	" 10	" 9
871	" 14	" 9¾	318	" 19	" 11¾
1824	" 13	" 10½	445	" 10	" 9½
1716	" 8	" 8¼	764	" 10	" 9

£	s.	d.	£	s.	d.
841	" 10	" 8¼	847	" 14	" 4
764	" 7	" 11¾	714	" 4	" 11¾
77	" 2	" 8½	133	" 9	" 4¾
841	" 10	" 8¼	847	" 14	" 4

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$$\begin{array}{r}
 \text{£} \quad \text{s.} \quad \text{d.} \\
 527 \text{ " } 14 \text{ " } 10 \frac{1}{4} \\
 147 \text{ " } 19 \text{ " } 7 \frac{3}{4} \\
 \hline
 379 \text{ " } 15 \text{ " } 2 \frac{1}{2} \\
 \hline
 527 \text{ " } 14 \text{ " } 10 \frac{1}{4} \\
 \hline
 \hline
 \end{array}$$

$$\begin{array}{r}
 \text{£} \quad \text{s.} \quad \text{d.} \\
 957 \text{ " } 14 \text{ " } 7 \frac{1}{4} \\
 189 \text{ " } 15 \text{ " } 1 \frac{3}{4} \\
 \hline
 767 \text{ " } 19 \text{ " } 5 \frac{1}{2} \\
 \hline
 957 \text{ " } 14 \text{ " } 7 \frac{1}{4} \\
 \hline
 \hline
 \end{array}$$

$$\begin{array}{r}
 \text{£} \quad \text{s.} \quad \text{d.} \\
 213 \text{ " } 8 \text{ " } 3 \frac{1}{4} \\
 200 \text{ " } 15 \text{ " } 4 \frac{3}{4} \\
 \hline
 12 \text{ " } 12 \text{ " } 10 \frac{1}{2} \\
 \hline
 213 \text{ " } 8 \text{ " } 3 \frac{1}{4} \\
 \hline
 \hline
 \end{array}$$

$$\begin{array}{r}
 \text{£} \quad \text{s.} \quad \text{d.} \\
 952 \text{ " } 14 \text{ " } 1 \frac{1}{4} \\
 265 \text{ " } 9 \text{ " } 2 \frac{3}{4} \\
 \hline
 687 \text{ " } 4 \text{ " } 10 \frac{1}{2} \\
 \hline
 952 \text{ " } 14 \text{ " } 1 \frac{1}{4} \\
 \hline
 \hline
 \end{array}$$

$$\begin{array}{r}
 \text{£} \quad \text{s.} \quad \text{d.} \\
 298 \text{ " } 16 \text{ " } 8 \\
 239 \text{ " } 7 \text{ " } 11 \frac{1}{4} \\
 \hline
 59 \text{ " } 8 \text{ " } 8 \frac{3}{4} \\
 \hline
 298 \text{ " } 16 \text{ " } 8 \\
 \hline
 \hline
 \end{array}$$

$$\begin{array}{r}
 \text{£} \quad \text{s.} \quad \text{d.} \\
 825 \text{ " } 3 \text{ " } 4 \frac{1}{4} \\
 799 \text{ " } 13 \text{ " } 9 \frac{3}{4} \\
 \hline
 25 \text{ " } 9 \text{ " } 6 \frac{1}{2} \\
 \hline
 825 \text{ " } 3 \text{ " } 4 \frac{1}{4} \\
 \hline
 \hline
 \end{array}$$

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£	s.	d.
1285	17	4
879	18	1½
405	19	2½
1285	17	4

£	s.	d.
528	19	10¾
144	0	0
334	19	10½
"	"	"

£	s.	d.
981	7	3¼
825	10	4½
155	16	10¾
981	7	3¼

£	s.	d.
928	18	4
887	3	7
41	14	9
928	18	4

£	s.	d.
14111	18	10¼
7141	19	3
6969	19	17¼
14111	18	10¼

£	s.	d.
762	7	10¼
615	14	1¾
146	13	8½
762	7	10¼

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£	s.	d.
718	3	7 $\frac{1}{4}$
690	14	11 $\frac{1}{2}$
27	8	7 $\frac{3}{4}$
718	3	7 $\frac{1}{4}$

£	s.	d.
146	12	11
99	19	4 $\frac{1}{2}$
46	13	6 $\frac{1}{2}$
146	12	11

£	s.	d.
583	17	10 $\frac{1}{4}$
489	9	8 $\frac{3}{4}$
84	8	1 $\frac{1}{2}$
583	17	10 $\frac{1}{4}$

£	s.	d.
909	8	11
888	14	3 $\frac{1}{4}$
20	14	7 $\frac{2}{3}$
909	8	11

£	s.	d.
541	13	4
498	15	11
42	17	5
541	13	4

£	s.	d.
982	17	11 $\frac{1}{4}$
874	19	3 $\frac{3}{4}$
107	18	7 $\frac{1}{2}$
982	17	11 $\frac{1}{4}$

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£	s.	d.	£	s.	d.
980	10	4 $\frac{3}{4}$	1111	1	1
899	0	0	888	19	11 $\frac{3}{4}$
<u>81</u>	<u>10</u>	<u>4$\frac{3}{4}$</u>	<u>222</u>	<u>1</u>	<u>1$\frac{1}{4}$</u>
<u>980</u>	<u>10</u>	<u>4</u>	<u>1111</u>	<u>1</u>	<u>1</u>

£	s.	d.	£	s.	d.
1120	11	11 $\frac{3}{4}$	350	3	1 $\frac{1}{2}$
1439	17	1 $\frac{1}{2}$	279	15	7
<u>5680</u>	<u>14</u>	<u>10$\frac{1}{4}$</u>	<u>70</u>	<u>7</u>	<u>6$\frac{1}{2}$</u>
<u>7120</u>	<u>11</u>	<u>11$\frac{3}{4}$</u>	<u>350</u>	<u>3</u>	<u>1$\frac{1}{2}$</u>

£	s.	d.	£	s.	d.
705	15	1 $\frac{1}{4}$	900	15	4 $\frac{1}{4}$
605	8	4	855	3	1 $\frac{3}{4}$
<u>100</u>	<u>6</u>	<u>9$\frac{1}{4}$</u>	<u>45</u>	<u>12</u>	<u>3$\frac{1}{2}$</u>
<u>705</u>	<u>15</u>	<u>1$\frac{1}{4}$</u>	<u>900</u>	<u>15</u>	<u>4$\frac{1}{4}$</u>

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£	s.	d.
227	19	11 $\frac{1}{4}$
178	0	0 $\frac{3}{4}$
49	19	10 $\frac{3}{4}$
227	19	11 $\frac{1}{4}$

£	s.	d.
467	0	2 $\frac{1}{4}$
267	19	8
199	0	6 $\frac{1}{4}$
467	0	2 $\frac{1}{4}$

£	s.	d.
175	3	11
60	14	10
114	9	1
175	3	11

£	s.	d.
999	3	7 $\frac{1}{4}$
898	9	10
100	13	9 $\frac{1}{4}$
999	3	7 $\frac{1}{4}$

£	s.	d.
861	19	7
709	10	0
152	9	7
861	19	7

£	s.	d.
1111	11	11
809	14	1 $\frac{3}{4}$
301	17	9 $\frac{1}{4}$
1111	11	11

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£	s.	d.		£	s.	d.			
123	"	12	"	3 $\frac{1}{4}$	456	"	14	"	4
99	"	19	"	10 $\frac{1}{2}$	189	"	(1)	"	11 $\frac{3}{4}$
23	"	12	"	4 $\frac{3}{4}$	267	"	13	"	4 $\frac{1}{4}$
123	"	12	"	3 $\frac{1}{4}$	456	"	14	"	4

£	s.	d.		£	s.	d.			
1867	"	4	"	1 1/2	493	"	8	"	7 1/4
1705	"	19	"	10	399	"	17	"	9 1/2
161	"	4	"	3 1/2	93	"	10	"	9 3/4
867	"	4	"	1 1/2	493	"	8	"	7 1/4

£	s.	d.		£	s.	d.			
4854	"	13	"	6	831	"	7	"	3
1746	"	19	"	10 $\frac{3}{4}$	700	"	12	"	11 $\frac{1}{4}$
3107	"	13	"	7 $\frac{1}{4}$	130	"	14	"	3 $\frac{3}{4}$
4854	"	13	"	6	831	"	7	"	3

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£	s.	d.
426	10	3
190	14	10 $\frac{1}{4}$
<u>235</u>	<u>15</u>	<u>4$\frac{3}{4}$</u>
<u>426</u>	<u>10</u>	<u>3</u>

£	s.	d.
1396	10	0
714	0	11 $\frac{1}{4}$
<u>682</u>	<u>9</u>	<u>0$\frac{3}{4}$</u>
<u>1396</u>	<u>10</u>	<u>0</u>

£	s.	d.
250	18	4
111	19	5 $\frac{3}{4}$
<u>138</u>	<u>18</u>	<u>10$\frac{1}{4}$</u>
<u>250</u>	<u>18</u>	<u>4</u>

£	s.	d.
978	2	4 $\frac{1}{4}$
888	7	2
<u>89</u>	<u>15</u>	<u>2$\frac{1}{4}$</u>
<u>978</u>	<u>2</u>	<u>4$\frac{1}{4}$</u>

£	s.	d.
905	14	5 $\frac{1}{4}$
174	18	6 $\frac{3}{4}$
<u>730</u>	<u>15</u>	<u>10$\frac{1}{2}$</u>
<u>905</u>	<u>14</u>	<u>5$\frac{1}{4}$</u>

£	s.	d.
204	3	3
149	19	10 $\frac{3}{4}$
<u>54</u>	<u>3</u>	<u>4$\frac{1}{4}$</u>
<u>204</u>	<u>3</u>	<u>3</u>

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£	s.	d.
1374	18	9 $\frac{1}{4}$
831	19	7
542	19	2 $\frac{1}{4}$
1374	18	9 $\frac{1}{4}$

£	s.	d.
981	18	8
191	19	11 $\frac{1}{4}$
789	18	8 $\frac{3}{4}$
981	18	8

£	s.	d.
1678	19	4 $\frac{1}{2}$
870	13	9 $\frac{3}{4}$
808	5	6 $\frac{3}{4}$
1678	19	4 $\frac{1}{2}$

£	s.	d.
800	4	3 $\frac{1}{2}$
919	17	2
880	7	1 $\frac{1}{2}$
800	4	3 $\frac{1}{2}$

£	s.	d.
811	10	4
781	19	11
29	10	5
811	10	4

£	s.	d.
467	3	8 $\frac{1}{2}$
289	16	9
177	6	11 $\frac{1}{2}$
467	3	8 $\frac{1}{2}$

£	s.	d.	£	s.	d.
847	"	1	"	1	"
189	"	1	"	1	"
658	"	10	"	14	"
847	"	1	"	0	"

£	s.	d.	£	s.	d.
509	"	3	"	3	"
119	"	18	"	19	"
389	"	4	"	4	"
509	"	3	"	3	"

£	s.	d.	£	s.	d.
888	"	8	"	7	"
177	"	8	"	18	"
710	"	10	"	8	"
888	"	8	"	7	"

£	s.	d.	£	s.	d.
1871	" 16	" 8 $\frac{1}{4}$	1888	" 8	" 8
1487	" 10	" 11	919	" 8	" 8 $\frac{3}{4}$
<u>484</u>	" 5	" 9 $\frac{1}{4}$	<u>868</u>	" 19	" 11 $\frac{1}{2}$
<u>1871</u>	" 16	" 8 $\frac{1}{4}$	<u>1888</u>	" 8	" 8

£	s.	d.	£	s.	d.
7500	" 14	" 3	1788	" 18	" 2
1439	" 9	" 9 $\frac{1}{4}$	874	" 8	" 2 $\frac{1}{4}$
<u>6161</u>	" 4	" 5 $\frac{3}{4}$	<u>914</u>	" 9	" 11 $\frac{3}{4}$
<u>7500</u>	" 14	" 3	<u>1788</u>	" 18	" 2

£	s.	d.	£	s.	d.
1642	" 0	" 0	714	" 10	" 0
774	" 19	" 5 $\frac{1}{2}$	179	" 10	" 11 $\frac{1}{2}$
<u>867</u>	" 0	" 6 $\frac{1}{2}$	<u>534</u>	" 19	" 0 $\frac{1}{2}$
<u>1642</u>	" 0	" 0	<u>714</u>	" 10	" 0

Suppose a person is indebted to another the sum of 500l. and pays him at one time 25l. at another 374l. 10s. 5d. and at another 48l. 5s. How much remains unpaid?

500 " 0 4 0

25 " 0 4 0

374 " 10 4 5

48 " 5 4 0

447 " 15 4 5

52 " 4 4 7

A merchant on commencing business owes 310l. has in cash, &c. &c. 15,784l. 6s. 8d. clears the first year a 1000l. What was the balance at the expiration of that period?

15784 " 6 " 8

1000 " " " "

16784 " 6 " 8

310 " " " "

16474 " 6 " 8

16784 " 6 " 8

A horse and chaise cost 64l. 10s. the horse was valued at 25 guineas. What was the price of the chaise?

64 " 10 " 0

25 " 5 " 0

38 " 5 " 0

64 " 10 " 0

If a gentleman's steward receives rents to the amount of 5000l. and remits the sums of four hundred and twenty pounds, nine hundred and nineteen pounds ten shillings, and 210l. 19s. 6d. what remains yet in hand?

5000 " 0 " 0

420 " 0 " 0

919 " 10 " 0

210 " 19 " 6

1550 " 9 " 6

3450 " 10 " 6

SIMPLE MULTIPLICATION

IS a compendious kind of addition, teaching how to find the amount of any given number by repeating it any proposed number of times, and consists of three terms, viz.

1. The number to be multiplied, which is called the multiplicand.

2. The number by which the operation is performed, called the multiplier.

3. The number produced by multiplying, which is called the product.

MULTIPLICATION AND DIVISION TABLE.

1	2	3	4	5	6	7	8	9	10	11	12
2	4	6	8	10	12	14	16	18	20	22	24
3	6	9	12	15	18	21	24	27	30	33	36
4	8	12	16	20	24	28	32	36	40	44	48
5	10	15	20	25	30	35	40	45	50	55	60
6	12	18	24	30	36	42	48	54	60	66	72
7	14	21	28	35	42	49	56	63	70	77	84
8	16	24	32	40	48	56	64	72	80	88	96
9	18	27	36	45	54	63	72	81	90	99	108
10	20	30	40	50	60	70	80	90	100	110	120
11	22	33	44	55	66	77	88	99	110	121	132
12	24	36	48	60	72	84	96	108	120	132	144

[38]

1 7 6 8 3 0 0 8 4 3 7 6 4 8 7

12

2121961012517844

8 7 6 4 3 7 8 8 3 7 4 0 0 8 7 6 4 1

11

9640816721140975051

3 7 1 6 9 9 4 3 7 0 0 8 7 4 7 8

10

37169943700874780

3 7 1 6 4 3 7 1 6 8 7 4 3 7 4 7

9

33447934518693723

8 7 1 6 4 8 3 7 6 9 9 4 3 7 4 7

8

69731870159549976

[39]

7255888833360087642

7

59791221833520613494

872800837655437682

6

5236805025982626092

3437692222376431

5

17188461111882155

8437100019943743

4

33748400079774972

3716437083742769

3

11149311251228307

[40]

184716991008376487

2

269433982016752974

222710986371400847

13

2995242822828211011

76483716999480008

14

1070772037992720112

3718400843766487

15

55776012656497305

9948371994871648

16

159174051917946368

[41]

8 4 1 7 3 6 8 0 0 4 8 7 3 7 6

17

17309525608285392

6 8 4 7 1 6 0 4 8 3 7 7 8 4 7 3 8 0

18

12324888870801252840

7 3 8 7 7 1 4 6 7 9 8 9 0 4 3 0

19

140266578917918170

8 3 6 7 3 1 4 6 7 4 7 3 4 7 1 7

20

17346293492694340

7 8 7 7 4 1 3 6 4 4 8 3 9 7 9 9

30

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2 3 1 1 4 4 5 7 1 0 7 0 1 8 2 0 8

7 4 1 5 0 7 5 2 8 4 7 9 5 1 3 7

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5 1 9 0 5 5 2 6 9 9 2 5 6 5 9 5 9

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6 5 7 2 4 0 9 8 7 1 3 9 0 7 8 5

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5 9 1 5 1 6 8 8 8 4 2 5 1 7 0 6 5

5 2 4 7 8 5 9 1 3 6 2 5 3 0 8 7

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7 2 4 8 6 5 1 9 7 2 3 6 8 5 4 6

11

8 2 1 4 0 5 7 9 3 2 8 6 1 7 3 8

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7 3 2 5 1 9 0 4 7 3 5 8 3 5 9 7

13

8 7 1 3 6 5 9 0 8 3 1 4 6 5 1 7

14

6 5 3 1 4 0 9 7 8 5 3 1 7 0 8 5

15

[46]

7 5 1 4 0 9 3 2 5 8 4 0 3 6 9 1
16

3 5 1 8 9 0 4 0 9 1 3 6 7 8 5 9
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4 6 7 8 1 5 9 2 8 3 6 0 9 5 1 7
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3 1 5 9 0 8 4 3 2 1 5 6 7 8 3 0
19

6 2 1 5 9 0 8 4 3 2 1 5 9 0 8 7
20

[47]

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1312068618329

1499506992376

1312068618329

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[48]

1 7 1 8 7 6 4 8 7 6 4

175

7 8 4 2 0 0 0 8 7 6

987

1 3 8 7 6 4 8 3 9 9 9

1432

MULTIPLICATION OF MONEY

TEACHES to find the value of any given number of yards, ells, lbs. &c. &c. at any proposed price per yard, ell, lb. &c. &c.

EXAMPLES.

2 lbs. of Tea, at $\overset{s.}{7}^{\text{''}} \overset{d.}{4}\frac{3}{4}$ per lb.

$$\begin{array}{r} 2 \\ \hline 14^{\text{''}} 9\frac{2}{4} \end{array}$$

3 8 " $\frac{7}{3}$ per lb.

$$\begin{array}{r} \hline 15^{\text{''}} 9 \end{array}$$

4 at $9^{\text{''}} 4$ per lb.

$$\begin{array}{r} 4 \\ \hline 36^{\text{''}} 17^{\text{''}} 4 \end{array}$$

5 at $10^{\text{''}} 3$ per lb.

$$\begin{array}{r} 5 \\ \hline \end{array}$$

[50]

6 lbs. of Tea at 11 ^{s.} 11 ^{d.} per lb.
6

7 at 12 " 10 per lb.
7

8 yds. of Cloth at 14 " 9 per yd.

9 at 15 " 8 per yd.
9

10 at 16 " 7 per yd.
10

11 yds of Cloth at 17 ^{s.} ^{d.} 6 per yd.
 11

12 at 18 " 5 per yd.
 12

12 at 19 " 4 per yd.
 12

14½ yds of Lace at 13 " 3 per yd.

[52]

15 $\frac{3}{4}$ yds of Lace at 15 ^{s.} ^{d.} 2 per yd.

18 $\frac{1}{4}$ at 17 " 3 per yd.

21 $\frac{1}{2}$ at 19 " 4 per yd.

21 $\frac{1}{4}$ lbs. of Beef at 5^{d.} per lb.

26 $\frac{3}{4}$ at 4 per lb.

29 $\frac{1}{2}$ at 6 per lb.

34 $\frac{1}{4}$ lbs. of Veal at ^{d.} 7 $\frac{3}{4}$ per lb. 5

39 $\frac{1}{2}$ at 8 $\frac{1}{4}$ per lb. 6

46 $\frac{3}{4}$ at 6 $\frac{1}{2}$ per lb.

[55]

d.

55 $\frac{1}{4}$ lbs. of Mutton at 4 $\frac{1}{4}$ per lb.

60 $\frac{1}{2}$

at 5 $\frac{1}{2}$ per lb.

66 $\frac{3}{4}$

at 6 $\frac{3}{4}$ per lb.

69 $\frac{3}{4}$ lbs. of Butter at ^{d.} 6 $\frac{3}{4}$ per lb.

74 $\frac{1}{2}$ at 7 $\frac{1}{2}$ per lb.

86 $\frac{3}{4}$ at 8 $\frac{1}{4}$ per lb.

Yds. £ s. d.
 90 $\frac{1}{4}$ of Lace at 3 " 14 " 7 per yd.

100 $\frac{1}{2}$ at 1 " 8 " 3 per yd.

112 $\frac{3}{4}$ at 2 " 4 " 4 per yd.

Gallons.
 $116\frac{1}{4}$ of Brandy at $16^s 3^d$ p.gal.

$121\frac{1}{2}$

at $13^s 4^d$ p.gal.

$126\frac{3}{4}$

at $14^s 5^d$ p.gal.

[59]

Ounces.

s.

d.

132 $\frac{1}{2}$ of Silver at 4 " 11 per oz.

150 $\frac{3}{4}$

at 5 " 8 $\frac{3}{4}$ per oz.

156 $\frac{1}{4}$

at 5 " 3 $\frac{1}{4}$ per oz.

BILLS of PARCELS.

A MERCER'S BILL.

Mrs. JONES,

Bought of WILLIAM BROOK, March 4, 1784.

	s.	d.	£	s.	d.
9 Yards of Silk	at	13 6	.....	per	Yard
14½ Yards of flower'd Ditto	at	15 11	.....	per	Yard
23 Yards of Sarfenet	at	6 4	.....	per	Yard
30½ Yards of Brocade	at	9 11½	.....	per	Yard
15¼ Yards of Genoa Velvet	at	19 10	.....	per	Yard
18 Yards of Lustring	at	5 8	.....	per	Yard

£

A L I N E N - D R A P E R ' s B I L L .

Mr. S A L M O N ,

Bought of JOHN WILLIAMS, Jan. 4, 1784.

	s.	d.	£	s.	d.
34 Ells of Dowlas.....	at	1 10	.....	per Ell.....	
28 $\frac{1}{4}$ Ells of Holland.....	at	5 6	.....	per Ell.....	
13 $\frac{1}{2}$ Ells of Diaper	at	1 4 $\frac{1}{2}$	.....	per Ell.....	
58 Damask Napkins.....	at	2 3	.....	Each.....	
5 $\frac{1}{2}$ Yards of Cambric	at	13 7	.....	per Yard..	
74 $\frac{3}{4}$ Yards of Muffin.....	at	8 11	.....	per Yard..	

 £

A WOOLLEN-DRAPERS BILL.

Mrs. WILLIAMS,

Bought of S. BEVINGTON, July 6, 1784.

	s.	d.	£	s.	d.
50 Yards of Drugget	7	4			per Yard
44 Yards of Broad Cloth	15	11			per Yard
8 Yards of black Cloth	16	4			per Yard
90 Yards of Shalloon.....	1	8			per Yard
35 Yards of Serge.....	1	11½			per Yard
18 Yards of superfine Scarlet.....	19	0			per Yard

 £

A MILLINER'S BILL.

Mrs. JAMESON,

Bought of SARAH WILLIAMS, June 4, 1783.

	s.	d.	£	s.	d.
18½ Yards of Fine Lace.....at 15 7 per Yard.....	15	7			
12 Pair of Kid Gloves at 2 2 per Pair.....	2	2			
18 Fans with French Mounts....at 3 9 Each.....	3	9			
4 Fine Lace Tippets.....7 10	7	10			
4 Dozen of Linen Gloves.....at 1 4 per Pair.....	1	4			
8 Sets of Knots at 2 6 per Set.....	2	6			

 £

[64]

A GROCER'S BILL.

Mr. FOX,

Bought of THOMAS SMITH, Aug. 7, 1784.

	£	s.	d.	£	s.	d.
24½ lbs. of best Green Tea.....	at 0	19	7½.....per lb.....			
26¾ lbs. of Imperial Tea	at 1	5	8 per lb.....			
38½ lbs. of best Bohea.....	at 0	14	2 per lb.....			
19½ lbs. of Coffee	at 0	5	11 per lb.....			
13¼ lbs. of Rice	at 0	0	5½.....per lb.....			
6 lbs. of Pepper.....	at 0	1	6 per lb.....			

£

SIMPLE DIVISION

TEACHES to find how often one number is contained in another of the same denomination, and thereby performs the work of many subtractions.

To this rule belong three terms, viz.

1. The number to be divided, which is called the dividend.

2. The number by which you divide, called the divisor.

3. The number produced by dividing, which is called the quotient.

The parts which are over when the work is finished are called the remainder.

EXAMPLES.

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Proof

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[66]

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11) 7 1 4 8 0 8 3 7 5 0 0 0 8 (

10) 8 7 0 0 8 8 7 4 0 8 3 0 0 (

9) 7 3 4 0 0 8 3 7 1 6 4 0 9 (

[67]

10) 8 7 6 4 3 0 8 3 7 1 0 7 4 (

9) 1 0 0 0 0 7 1 6 4 0 8 3 7 (

8) 7 1 6 4 8 0 0 8 3 7 1 6 4 (

7) 6 9 9 9 4 3 7 1 6 4 8 7 1 (

6) 1 1 3 7 1 6 0 0 8 0 0 9 2 (

5) 7 1 6 4 0 0 9 1 6 4 3 7 1 (

4) 5 4 8 7 1 6 9 9 4 8 3 7 1 (

3) 8 7 1 0 0 8 7 1 6 4 3 7 1 (

[69]

4) 8 7 6 4 9 9 9 4 6 7 0 8 3 (

3) 8 7 1 0 8 3 7 1 6 3 7 1 6 (

2) 1 0 8 3 7 1 6 4 0 8 3 7 6 (

3) 7 1 4 0 1 0 8 3 7 4 7 1 6 (

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3) 8716400837887)

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7) 7 1 8 0 0 0 4 7 1 4 0 0 0 (

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9) 3007670083716(

10) 8716471643700(

11) 8710088716437(

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12) 6304037861080(

11) 7086037701063(

10) 1674436710708(

9) 8871060413778(

[74]

8) 3 3 3 2 8 1 7 1 6 1 4 1 6 (

7) 8 3 7 0 5 0 8 0 4 0 1 8 7 (

6) 8 8 7 4 0 0 8 0 3 0 7 0 8 (

5) 8 3 7 1 0 6 0 4 0 4 3 9 7 (

[75]

4) 4 7 8 0 7 1 6 7 4 3 3 0 8 (

3) 7 1 3 0 8 0 6 0 4 0 7 1 0 (

2) 4 7 1 3 6 4 8 6 0 8 7 0 1 (

3) 1 6 7 9 8 9 4 9 6 4 1 3 7 (

4) 2 1 9 1 0 3 0 7 8 1 0 6 0 (

5) 1 7 7 1 3 6 4 4 0 6 0 9 1 (

6) 1 7 5 4 3 8 7 8 1 4 6 9 9 (

7) 1 8 7 7 1 3 0 4 0 6 8 7 1 (

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8) 3 8 7 8 6 0 4 7 9 6 9 4 9 (

9) 6 8 1 7 7 1 3 0 6 8 7 1 3 (

10) 6 7 1 0 3 8 3 8 7 0 1 4 6 (

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DIVISION OF MONEY

TEACHES how to divide a given sum of different denominations into any required number of parts.

EXAMPLES.

If a footman's wages be 14l. 10s. per annum, how much is that per quarter?

Divide 186l. 14s. 4 d. into six shares.

If 9 yards of Cambric cost 2l. 5 s. 5 d. what is that per yard?

If 10 lbs. of Tea cost 5l. 11 s. 6d. how much is that per lb. ?

If 11 yds. of Ribbon cost 6s. 11 d. what is the price of 1 yard ?

If 12 lbs. of Meat cost 6s. 11d. $\frac{3}{4}$, what is that per lb. ?

A tradesman gained 500l. in fourteen years, how much was that per annum, supposing he saved an equal sum yearly?

Gave 3l. 11s. 11d. for 136 lbs. of Cheese, at what rate did I buy it per lb.?

A Lottery Ticket of 10,000l. divided among sixteen persons, what is the value of one share?



House-Expences being 300l. per ann. how much is that per week, month, or quarter?

ARITHMETICAL TABLES.

A T A B L E

Of the customary Weight of Goods.

	lbs.
A Firkin of Butter is	56
A Firkin of Soap	64
A Barrel of Pot Ashes	200
A Barrel of Anchovies	30
A Barrel of Candles	120
A Barrel of Soap	256
A Barrel of Butter	224
A Fother of Lead is 19 cwt. and a half	
A Stone of Iron	14
A Stone of Butcher's Meat	8
A Gallon of Train Oil	7½
A Faggot of Steel	120
A Stone of Glafs	5
A Seam of Glafs is 24 Stone, or	120

B R E A D.

	lb.	oz.	dr.
A Peck Loaf weighs	17	6	1
A Half Peck Loaf	8	11	0
A Quartern Loaf	4	5	8

AVOIRDUPOISE Weight.

16 Drams make	1 Ounce
16 Ounces	1 Pound
28 Pounds	1 Quarter
4 Quarters	1 Cwt.
20 Hundred Weight	1 Ton

By this Weight are weighed all Things of a coarse or droffy Nature; such as Butter, Cheese, Flesh, Grocery-Wares, and all Metals except Gold and Silver.

C U B I C Measure.

1728 Cubic Inches make 1 Cubic Foot	
27 Cubic Feet	1 Cubic Yard

T R O Y Weight.

24 Grains make	1 Penny Weight
20 Penny Weights	1 Ounce
12 Ounces	1 Pound

By this Weight are weighed Jewels, Gold, Silver, Corn, Bread, & Liquors.

A P O T H E C A R I E S Weight.

20 Grains make	1 Scruple
3 Scruples	1 Dram
8 Drams	1 Ounce
12 Ounces	1 Pound

Apothecaries use this Weight in compounding their Medicines, but they buy their Drugs by Avoirdupoise Weight.

H A Y.

56 lbs. of old Hay	} make a Truss
60 lbs. of new Hay	
36 Trusses	make a Load

A L E and B E E R Measure.

2 Pints make	1 Quart
4 Quarts	1 Gallon
8 Gallons	1 Firkin of Ale
9 Gallons	1 Firkin of Beer
2 Firkins	1 Kilderkin
2 Kilderkins	1 Barrel
3 Kilderkins	1 Hoghead
3 Barrels	1 Butt

Note. The Ale Gallon contains 282 Cubic Inches. In London the Ale Firkin contains 8 Gallons, and the Beer Firkin 9, other Measures being in the same Proportion.

COAL Measure.

4 Pecks	make . . .	1 Bushel
9 Bushels		1 Vat or Strike
36 Bushels		1 Chaldron
21 Chaldrons		1 Score

DRY Measure.

2 Pints	make . . .	1 Quart
2 Quarts		1 Pottle
2 Pottles		1 Gallon
2 Gallons		1 Peck
4 Pecks		1 Bushel
8 Bushels		1 Quarter
5 Quarters		1 Wey or Load
4 Bushels		1 Coomb
5 Pecks		1 Bush. Water Measure
10 Coombs		1 Wey
2 Weys		1 Last

By this Measure Salt, Lead, Ore, Oysters, Corn, and other dry Goods are measured.

LONG Measure.

3 Barley Corns	make . . .	1 Inch
12 Inches		1 Foot
3 Feet		1 Yard
5 Feet		1 Fathom
5½ Yards		1 Poie
40 Poles		1 Furlong
8 Furlongs		1 Mile
3 Miles		1 League
60 Geographical Miles, or } 69½ statute Miles . . }		1 Degree
360 Degrees the Circumference of the earth		

WOOL Weight.

7 lbs.	make	1 Clove
2 Cloves		1 Stone
2 Stones		1 Tod
6½ Tods		1 Wey
2 Weys		1 Sack
12 Sacks		1 Last

WINE Measure.

2 Pints	make . . .	1 Quart
4 Quarts		1 Gallon
42 Gallons		1 Tierce
63 Gallons		1 Hoghead
84 Gallons		1 Puncheon
2 Hogheads		1 Pipe or Butt
2 Pipes		1 Tun

By this Measure Brandies, Spirits, Perry, Cyder, Mead, Vinegar, Oil, and Honey are measured.

Note. 231 solid Inches make a Gallon, and 10 Gallons make an Anker.

CLOTH Measure.

4 Nails	make . . .	1 Quarter
4 Quarters		1 Yard
3 Quarters		1 Ell Flemish
5 Quarters		1 Ell English
6 Quarters		1 Ell French

SQUARE Measure.

144 Square Inches	make . . .	1 Square Foot
9 Square Feet		1 Square Yard
30½ Square Yards		1 Square Pole
40 Square Poles		1 Square Rood
4 Square Roods		1 Square Acre

TIME.

60 Seconds	make	1 Minute
60 Minutes		1 Hour
24 Hours		1 Day
7 Days		1 Week
4 Weeks		1 Month
13 Months, 1 Day, and 6 Hours, or 365 Days and 6 Hours, 1 Year nearly.		

The NUMBER of DAYS in each MONTH.

Thirty Days hath September,
April, June, and November;
February hath Twenty-eight alone,
And all the Rest have Thirty-one:
But Leap-Year coming once in Four,
Doth give to February one Day more.

PRACTICE TABLE.

The aliquot Parts of a Pound.

s.	d.	
10	0	are the Half
6	8	Third
5	0	Fourth
4	0	Fifth
3	4	Sixth
2	6	Eighth
2	0	Tenth
1	8	Twelfth

The aliquot Parts of a Shilling.

d.	
6	are the Half
4	Third
3	Fourth
2	Sixth
1½	Eighth
1	Twelfth

The Weight of Current Coins
as coined.

G O L D.

	dwt.	grs
A Guinea	5	9½
Half a Guinea	2	16¾
Quarter Ditto	1	8¼

S I L V E R.

A Crown	19	8½
Half Ditto	9	16½
A Shilling	3	21
A Sixpence	1	22½

WEIGHTS CURRENT.

A Guinea	5	8
Half a Guinea	2	16
Quarter Ditto	1	8

The NUMERATION TABLE.

Quadrillions.	Trillions.	Billions.	Millions.	Units.
187,432	965,315	123,648	987,312	894,432

F I N I S.